

Amendment to the claims:

1. (currently amended) A method for fabricating an array of optical fibers, comprising the steps of:

- providing a substrate for receiving the optical fibers;
- forming in the substrate through-holes;
- placing the optical fibers in the respective through-holes;
- applying a UV-cure adhesive into the respective through-holes, each of the optical fibers being coated with the UV-cure adhesive in corresponding one of the through-holes;
- adjusting a position of each optical fiber after said placing the optical fibers in the respective through holes and after ~~said~~ the applying the UV-cure adhesive into the respective through holes;
- protecting the UV-cure adhesive from UV light during the adjusting said position of each optical fiber; and
- UV curing the UV-cure adhesive to fix the optical fibers in the respective through-holes.

2. (previously presented) The method of claim 1, wherein the through-holes are formed to be spaced from each other by a predetermined distance.

3. (previously presented) The method of claim 2, wherein the through-holes are formed to have a substantially same distance from the bottom of the substrate.

4. (previously presented) The method of claim 1, wherein the adhesive is a metal solder, glass, heat cured epoxy, UV cured adhesive, or a combination comprising at least one of the foregoing.

5. (previously presented) The method of claim 1, wherein the adjusting step comprises:

- grasping an optical fiber with a position manipulator; and
- adjusting the optical fiber in a first direction to be aligned in accordance with reference measurements.

6. (previously presented) The method of claim 5, further comprising adjusting the optical fiber in a second direction to be aligned in accordance with the reference measurements.

7. (previously presented) The method of claim 6, wherein the first direction is one of vertical and horizontal directions in a surface perpendicular to the longitudinal direction of the through-holes, and the second direction is the other of the vertical and horizontal directions.

8. (cancelled)

9. (previously presented) The method of claim 1, wherein the UV-cure adhesive in all the through-holes is exposed to the UV light when all the optical fibers are aligned at a same time.

10. (previously presented) The method of claim 1, wherein the UV-cure adhesive in each of the through-holes is selectively exposed to the UV light in case that each of the optical fibers is separately aligned.

11. (previously presented) The method of claim 5, wherein the reference measurements include data representing target positions of cores of the respective optical fibers.

12. (previously presented) The method of claim 11, wherein the reference measurements include data representing distance between the core of each optical fiber and the bottom of the substrate.

13. (previously presented) The method of claim 12, wherein the reference measurements further include data representing distance between the cores of adjacent optical fibers.

14. (previously presented) The method of claim 1, wherein the substrate is a unitary substrate having the through-holes into which the respective optical fibers are inserted and the adhesive is injected.

15. (previously presented) The method of claim 1, wherein the substrate has lower and upper plates each having grooves to form the through-holes, each of the grooves of the lower plate being mated with corresponding one of the grooves of the upper plate to form corresponding one of the through-holes.

16. (previously presented) The method of claim 15, wherein each of the grooves of one or both of the lower and upper plates has a tapered portion so that each of the through-holes has an enlarged inlet portion into which an optical fiber is inserted.

17. (cancelled)

18. (cancelled)

19. (cancelled)

20. (cancelled)

21. (cancelled)

22. (cancelled)

23. (cancelled)

24. (previously presented) A method for fabricating an array of optical fibers, comprising the steps of:

providing a substrate for receiving the optical fibers;

forming in the substrate through-holes;  
placing the optical fibers in the respective through-holes;  
applying adhesive into the respective through-holes, each of the optical fibers being coated with the adhesive in corresponding one of the through-holes;  
adjusting a position of each optical fiber after said placing the optical fibers in the respective through holes and after said applying adhesive into the respective through holes, wherein the adjusting comprises,  
(a) grasping an optical fiber with a position manipulator, and  
(b) adjusting the optical fiber in a first direction to be aligned in accordance with the reference measurements; and  
curing the adhesive to fix the optical fibers in the respective through-holes.

25. (previously presented) The method of claim 24, wherein the through-holes are formed to be spaced from each other by a predetermined distance.

26. (previously presented) The method of claim 25, wherein the through-holes are formed to have a substantially same distance from the bottom of the substrate.

27. (previously presented) The method of claim 24, wherein the adhesive is a metal solder, glass, heat cured epoxy, UV cured adhesive, or a combination comprising at least one of the foregoing.

28. (previously presented) The method of claim 24, further comprising adjusting the optical fiber in a second direction to be aligned in accordance with the reference measurements.

29. (previously presented) The method of claim 28, wherein the first direction is one of vertical and horizontal directions in a surface perpendicular to the longitudinal direction of the through-holes, and the second direction is the other of the vertical and horizontal directions.

30. (previously presented) The method of claim 24, wherein the adhesive includes a UV-cured adhesive; and means for protecting the UV-cure adhesive from UV light during the adjusting step.

31. (previously presented) The method of claim 30, wherein the UV-cure adhesive in all the through-holes is exposed to the UV light in case that when all the optical fibers are aligned at a same time.

32. (previously presented) The method of claim 30, wherein the UV-cure adhesive in each of the through-holes is selectively exposed to the UV light in case that each of the optical fibers is separately aligned.

33. (previously presented) The method of claim 24, wherein the reference measurements include data representing target positions of cores of the respective optical fibers.

34. (previously presented) The method of claim 33, wherein the reference measurements include data representing distance between the core of each optical fiber and the bottom of the substrate.

35. (previously presented) The method of claim 34, wherein the reference measurements further include data representing distance between the cores of adjacent optical fibers.

36. (new) The method of claim 24, wherein the substrate is a unitary substrate having the through-holes into which the respective optical fibers are inserted and the adhesive is injected.

37. (new) The method of claim 24, wherein the substrate has lower and upper plates each having grooves to form the through-holes, each of the grooves of the lower

plate being mated with corresponding one of the grooves of the upper plate to form corresponding one of the through-holes.

38. (new) The method of claim 37, wherein each of the grooves of one or both of the lower and upper plates has a tapered portion so that each of the through-holes has an enlarged inlet portion into which an optical fiber is inserted.